AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1-16. (Canceled).

17. (Currently amended) A ~~computer-readable storage medium~~ computer component storing instructions for performing a method, when executed by a processor, for analyzing compliance, of one or more pieces of equipment, with a payload standard for a calendar period of time that spans multiple different hauling events, the method comprising:

determining a target payload for the one or more pieces of equipment during each of the multiple different hauling events that should result in compliance with the payload standard over the calendar period of time;

recording payload weight data for the one or more pieces of equipment during each individual hauling event;

determining a history of deviations of the recorded payload weight data from the target payload; and

modifying the target payload for future hauling events based on the history of deviations such that an actual loading profile of the one or more pieces of equipment for the calendar period of time substantially complies with the payload standard.

18. (Currently amended) The ~~computer-readable medium~~ computer component of claim 17, wherein the method further includes:

analyzing compliance with a first value of the payload standard based on the deviation determination; and

analyzing compliance with a second value of the payload standard based on the deviation determination, wherein the first value of the payload standard does not equal the second value of the payload standard.

19. (Currently amended) The ~~computer-readable medium~~ computer component of claim 17, wherein the target payload is determined based on at least one of the following features: slope of terrain or type of terrain.

20. (Currently amended) The ~~computer-readable medium~~ computer component of claim 17, wherein the method further includes determining an empty machine weight for an equipment type, including:

obtaining an empty machine weight for two or more pieces of equipment of the equipment type; and

calculating an average of the obtained empty machine weights.

21. (Currently amended) The ~~computer-readable medium~~ computer component of claim 17, wherein the method further includes determining an empty machine weight for an equipment type, including:

obtaining an empty machine weight for two or more pieces of equipment that are members of a fleet;

calculating an average of the obtained empty machine weights; and

applying the average as the determined empty machine weight for each piece of equipment in the fleet.

22. (Currently amended) The ~~computer-readable medium~~ computer component of claim 17, wherein determining a target payload includes:

determining an empty machine weight for a type of the one or more pieces of equipment;

determining a maximum gross machine weight for the type of the one or more pieces of equipment; and

subtracting the determined empty machine weight from the determined maximum gross machine weight.

23. (Currently amended) The ~~computer-readable medium~~ computer component of claim 17, wherein determining a history of deviations includes:

calculating a mean payload value based on the recorded payload weight data;

calculating a standard deviation based on the recorded payload weight data; and

determining a distribution of payloads based on the calculated mean payload value and the calculated standard deviation.

24. (Currently amended) The ~~computer-readable medium~~ computer component of claim 17, wherein the payload standard includes an acceptable overload value and an unacceptable overload value, and determining a history of deviations includes:

determining a first percentage of the recorded payload weight data less than the acceptable overload value; and

determining a second percentage of the recorded payload weight data greater than the unacceptable overload value.

25. (Currently amended) The ~~computer-readable medium~~ computer component of claim 24, wherein determining the second percentage includes:

choosing the lesser of the unacceptable overload value or a maximum gross machine weight as a maximum threshold; and

determining the second percentage of the recorded payload weight data greater than the maximum threshold.

26. (Currently amended) The ~~computer-readable medium~~ computer program of claim 24, further including:

providing a compliance rating for the one or more pieces of equipment based on the determined first and second percentages.

27. (Currently amended) The ~~computer-readable medium~~ computer component of claim 17, wherein the method further includes:

providing a compliance rating for the one or more pieces of equipment based on the history of deviations.

28. (Currently amended) The ~~computer-readable medium~~ computer component of claim 17, wherein the method further includes:

providing a compliance rating for the one or more pieces of equipment based on a set of one or more predetermined factors.

29. (Currently amended) The ~~computer-readable medium~~ computer component of claim 17, wherein the method further includes:

displaying graphical results illustrating the results of the compliance analysis.

30. (Canceled).

31. (Currently amended) The ~~computer-readable medium~~ computer component of claim 17, wherein determining the history of deviations includes:

calculating a standard deviation of the recorded payload weight data;

multiplying the standard deviation of the recorded payload weight data by a predetermined factor to obtain an offset; and

subtracting the offset from a maximum acceptable payload weight.

32. (Currently amended) The ~~computer-readable medium~~ computer component of claim 17, wherein the method further includes:

determining equipment identification information about the one or more pieces of equipment.

33. (Previously presented) A system for analyzing compliance, of one or more pieces of equipment, with a payload standard for a calendar period of time that spans multiple different hauling events, the system comprising:

an input module configured to receive payload weight data about one or more pieces of equipment;

a processing module, connected to the input module and programmed to:

determine a target payload for the one or more pieces of equipment during each of the multiple different hauling events that should result in compliance with the payload standard over the calendar period of time;

record payload weight data for the one or more pieces of equipment during each individual hauling event;

determine a history of deviations of the recorded payload weight data from the target payload; and

modify the target payload for future hauling events based on the history of deviations such that an actual loading profile of the one or more pieces of equipment for the calendar period of time substantially complies with the payload standard; and

an output module, connected to the processing module, and configured to provide the modified target payload.

34. (Original) The system of claim 33, wherein the input module is connected to at least one of a network connection, a device for accessing stored data, or a data input device.

35. (Original) The system of claim 33, wherein the one or more pieces of equipment are connected to the input module by a network connection.

36. (Original) The system of claim 33, wherein the output module is connected to at least one of a monitor, a printer, a device to store data, or a device to send data over a network.

37. (Previously presented) The system of claim 33, wherein the processing module includes:

a payload database;

a processor; and

an equipment database;

wherein the payload database includes payload weight data from the one or more pieces of equipment and the equipment database contains data about the payload standard.

38. (Currently amended) A ~~computer-readable storage medium~~ computer program storing instructions for performing a method, when executed by a processor, for reviewing a request for warranty service on a piece of equipment subject to a payload standard, the method comprising:

receiving a history of payload weight data associated with the piece of equipment;

analyzing the payload weight data for compliance with the payload standard; and

based on the analysis, providing a modified target payload weight for the piece of equipment that differs from a historical target payload weight and that should ensure continued warranty coverage through a remainder of a calendar time duration of the payload standard.

39. (Currently amended) The ~~computer-readable storage medium~~ computer program of claim 38, wherein analyzing the payload weight data further includes:

determining a first percentage of the payload weight data where each payload weight included in the first percentage is less than an acceptable overload value; and

determining if the first percentage is less than a predetermined threshold value.

40. (Currently amended) A ~~computer-readable storage medium~~ computer program storing instructions for performing a method, when executed by a processor,

for maintaining compliance with a payload standard for one or more pieces of equipment that spans a calendar time period corresponding to multiple different hauling events, where a first target payload is known for the one or more pieces of equipment and corresponds with compliance with the payload standard when achieved throughout the calendar time period, the method comprising:

obtaining payload weight data associated with one or more pieces of equipment for multiple different hauling events;

analyzing the payload weight data based on the payload standard and the first target payload;

~~receiving~~ generating as a result of the analysis, a second target payload based on the payload weight data, the second target payload being different from the first target payload and ~~that corresponds~~ corresponding with compliance with the payload standard when achieved throughout a remainder of the calendar time period; and

modifying loading practices for the one or more pieces of equipment based on the second target payload.

41. (Cancelled)

42. (Currently amended) The ~~computer-readable medium~~ computer component of claim 17, wherein the payload weight data includes:

a payload weight recorded for each individual hauling event; and

a time duration of each individual hauling event.

43. (Currently amended) The ~~computer-readable medium~~ computer component of claim 17, wherein the recorded payload weight data for a number of the multiple different hauling events is less than the target payload, and modifying the target payload includes increasing the target payload for future hauling events.

44. (Currently amended) The ~~computer-readable medium~~ computer component of claim 17, wherein the payload standard is associated with a loading profile agreed-upon by an warrantor of the one or more pieces of equipment and a responsible party of the one or more pieces of equipment.

45. (Currently amended) The ~~computer-readable medium~~ computer component of claim 44, wherein the loading profile includes factors corresponding to an operational time at a payload weight, and the payload weight.

46. (Currently amended) The ~~computer-readable medium~~ computer component of claim 44, wherein the method further includes affecting a warranty of the one or more pieces of equipment based on compliance with the agreed-upon loading profile.

47. (Currently amended) The ~~computer-readable medium~~ computer component of claim 17, wherein the target payload includes a payload weight that, when combined with a remaining amount of the calendar period of time of the one or more pieces of

equipment loaded at the payload weight and with the history of deviations, results in compliance with the payload standard over the entire calendar period of time.

48. (Currently amended) The ~~computer-readable medium~~ computer component of claim 38, further including responding to the request for warranty service based on the analysis.

49. (Previously presented) A computer system for reviewing a request for warranty service on a piece of equipment subject to a payload standard, the system comprising:

an input module of the computer system configured to receive payload weight data associated with the piece of equipment; and

a processing module of the computer system connected to the input module and programmed to:

analyze the payload weight data for compliance with the payload standard; and

based on the analysis, provide a modified target payload weight for the piece of equipment that differs from a historical target payload weight and that should ensure continued warranty coverage through a calendar time duration of the payload standard; and

an output module of the computer system connected to the processing module and configured to provide the modified target payload weight.

50. (Previously presented) The system of claim 49, wherein the processing module is further programmed to:

determine a first percentage of the payload weight data where each payload weight included in the first percentage is less than an acceptable overload value; and

determine if the first percentage is less than a predetermined threshold value.